UDOT Red Flag Analysis Training July 27, 2006

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Part 1

Why Do Red Flag Analysis?

Red Flag analysis completed early during a project checks that your project is adequately funded.

Red Flag monitoring before advertising and during bidding greatly increases the chance that your project can be awarded.

Part 2

Simple Overview of How Red Flag Analysis Works

Definitions:

- Red flag Project characteristic which increases anticipated project costs.
- Checkered flag Project characteristic which decreases anticipated project costs.
- Change order contingency Contingency used after bid opening to cover construction change orders; typically 10% of bid items (5% on Orange or Purple Book projects).

Triggers for Red Flags:

- Small Project: Flagged if Commission approved amount < \$500,000
- Plan Holders: (Flagged during bidding) triggered if bidding plan holders < 3 or total plan holders < 15
- Trail: Flagged if a trail project
- Local Government: Flagged if local government project

- Lump/Specialty: Flagged if 10% of project is lump or specialty work (Doesn't include mobilization or traffic control which are lump items)
- Materials: Flagged if a significant portion of work consists of cost sensitive materials (pavement, steel, concrete, etc). Triggered if:
 - Cost sensitive materials > 10% of total construction on large projects.
 - Cost sensitive materials > 30% of total construction on small projects.
- Schedule: Flagged if contractor will be under tight schedule constraints
- Location: Flagged if location could increase construction costs
- Large Project: (Checkered Flag)
 - Flag results in 2.5% cost reduction if Commission Approved Amount > \$5,000,000

OR

- Flag results in 1.5% cost reduction if Commission Approved Amount > \$2,000,000
- Orange Book: (Checkered Flag) Flagged if project is a preservation type project (Orange or Purple Book). Added bonus: also reduces change order contingency to 5%.
- Manual Flags: (Checkered or Red Flags) Based on engineering judgment. Examples:
 - o Record high oil prices may justify a manual Red Flag.
 - Overloaded contractors giving higher than normal bids because they are so busy may justify a manual Red Flag.
 - In stable price environments, a manual checkered Flag may be used to override the materials Red Flag.